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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,660	12/10/2001	Chiyoaki Iijima	111350	2201

25944 7590 05/13/2003

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EXAMINER
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LANDAU, MATTHEW C

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/006,660

Applicant(s)

IIJIMA, CHIYOAKI

Examiner

Matthew Landau

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-18 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restrictions***

Applicant's election with traverse of Species VIII in Paper No. 12 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application could be made without serious burden. This is not found persuasive because the search for "at least one color pigment layer being formed only at a part of an area overlapping the reflective area" (claim 10) is not required in the search for the species of Figure 32.

The requirement is still deemed proper and is therefore made FINAL.

Applicant indicated that claims 1 and 18-20 read on the elected species. However, a quick review of the drawings reveals that claims 2-8 and 19 also read on the elected species. Furthermore, claims 18 and 20 do not read on the elected species since Figure 32 does not show the limitation "at least one color pigment layer being formed only at a part of an area overlapping the reflective area". Therefore, claims 9-18 and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 12.

***Claim Objections***

Claim 1 is objected to because of the following informalities: it is suggested the limitation "the transmissive portion of least at one sub-pixel" be replaced with "the transmissive portion of at least [at] one sub-pixel". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 2, the limitation “being a dimension according to the spectral properties of the illumination light” renders the claim indefinite. Does Applicant intend to claim that the transmissive area varies according to some property of the illumination light? It is unclear what is meant by “according to”. It is unclear how the above-mentioned limitation further structurally defines the claimed invention. Note claim 3 has similar problems.

In regards to claim 8, the limitation “formed mutually separated for the number according to the dimension of the transmissive area” renders the claim indefinite. It is unclear what is meant by this limitation. Also, there is insufficient antecedent basis for “the number”.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 19 rejected under 35 U.S.C. 102(b) as being anticipated by Miyashita et al. (US Pat. 6,124,909, hereinafter Miyashita).

In regards to claim 1, Figures 26 and 27 of Miyashita disclose a liquid crystal display panel formed of liquid crystals LC sandwiched between a pair of opposing substrates (1 and 2), and including pixels having a plurality of sub-pixels each corresponding to different colors; an illumination device (column 30, lines 15-20) provided to an opposite side of the liquid crystal display panel in relation to an observation side that illuminates the liquid crystal display panel with illumination light; a transfective layer 3b disposed on the opposite side of the liquid crystals in relation to the observation side with a transmissive portion 3a that transmits the illumination light formed thereto, the transmissive portion being formed such that a first dimension of a transmissive area corresponding to the transmissive portion of at least one sub-pixel out of the plurality of sub-pixels and a second dimension of a transmissive area corresponding to the transmissive portion at another sub-pixel, differ; and a color filter (15R/15G/15B) provided corresponding to each of the sub-pixels that transmits light of a wavelength corresponding to a color of each sub-pixel. Miyashita discloses the area of the reflecting film 3b in each sub-pixel is the same as the area of the non-colored portion b of the color filter (column 30, lines 25-27). Therefore, the transmissive portion of the transfective layer has the same area as the colored portion of the color filter for each sub-pixel. Since Figure 26 shows the colored portion of 15G is different than 15R, the transmissive area corresponding to 15G must be different from the transmissive area corresponding to 15R.

In regards to claim 2, as best the examiner can ascertain, Figures 26 and 27 of Miyashita disclose the dimension of the transmissive area at each sub-pixel being a dimension according to spectral properties of the illumination light.

In regards to claim 3, Miyashita discloses the area of the colored portion of each color filter varies according to the particular color displayed (column 13, lines 40-45). As explained above, the area of the colored portion is equal to the area of the transmissive portion 3a. Therefore, Miyashita discloses the dimension of the transmissive area at each sub-pixel being a dimension according to the luminance of a wavelength of the illumination light corresponding to a color of the sub-pixel.

In regards to claim 4, Miyashita discloses the dimension of the transmissive area at a sub-pixel of a color corresponding to a wavelength of the illumination light with great luminance (green) being smaller than the dimension of the transmissive area at a sub-pixel of a color corresponding to a wavelength of the illumination light with small luminance (red) (column 13, lines 40-45).

In regards to claim 5, Miyashita discloses the dimension of the transmissive area at each of sub-pixels differs for each sub-pixel corresponding to a different color (column 13, lines 40-45).

In regards to claim 6, Miyashita discloses the dimension of the transmissive area at each of the sub-pixels differing according to a position of the sub-pixel within a substrate face of the liquid crystal display panel (column 29, lines 50-56).

In regards to claim 7, Figure 27 of Miyashita discloses the transmissive portion 3a being an opening portion formed in the transfective layer corresponding to each of the subpixels.

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In regards to claim 8, as best the examiner can ascertain the claimed invention, Figures 26 and 27 of Miyashita disclose the opening portion comprising opening parts of generally the same dimension that are formed mutually separated for the number according to the dimension of the transmissive area at the sub-pixels.

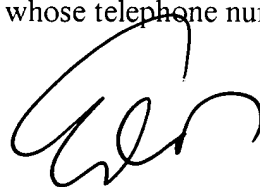
In regards to claim 19, it is inherent for a liquid crystal display to be used in some type of electronic apparatus, since a liquid crystal display requires electricity for operation.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (703) 305-4396.

The examiner can normally be reached from 8:00 AM-4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**EDDIE LEE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**

Matthew C. Landau

Examiner

May 9, 2003